

State of Montana Data Centers Overview for ITB – March 6, 2014

SMDC - Helena



MCDC - Miles City



Today's Agenda

- Capabilities
- SMDC (Helena) & MCDC (Miles City)
- Unique Features
- Capacity
- Entities Leasing Space
- Benefits

SMDC Helena Rack Space includes

- Provided Chatsworth rack and ISO-Base
- Exclusive use of available rack space
- Passive physical system monitoring
- Video surveillance
- Electrical power
- Dual power source (if your equipment supports)
- Uninterruptable power supply (UPS)
- Emergency generator power backup
- Fire detection and prevention
- Environmental monitoring



SMDC Helena U Space includes

- All the same benefits as Rack Space but...
- Shared use of available rack space



SMDC Helena Unique Features

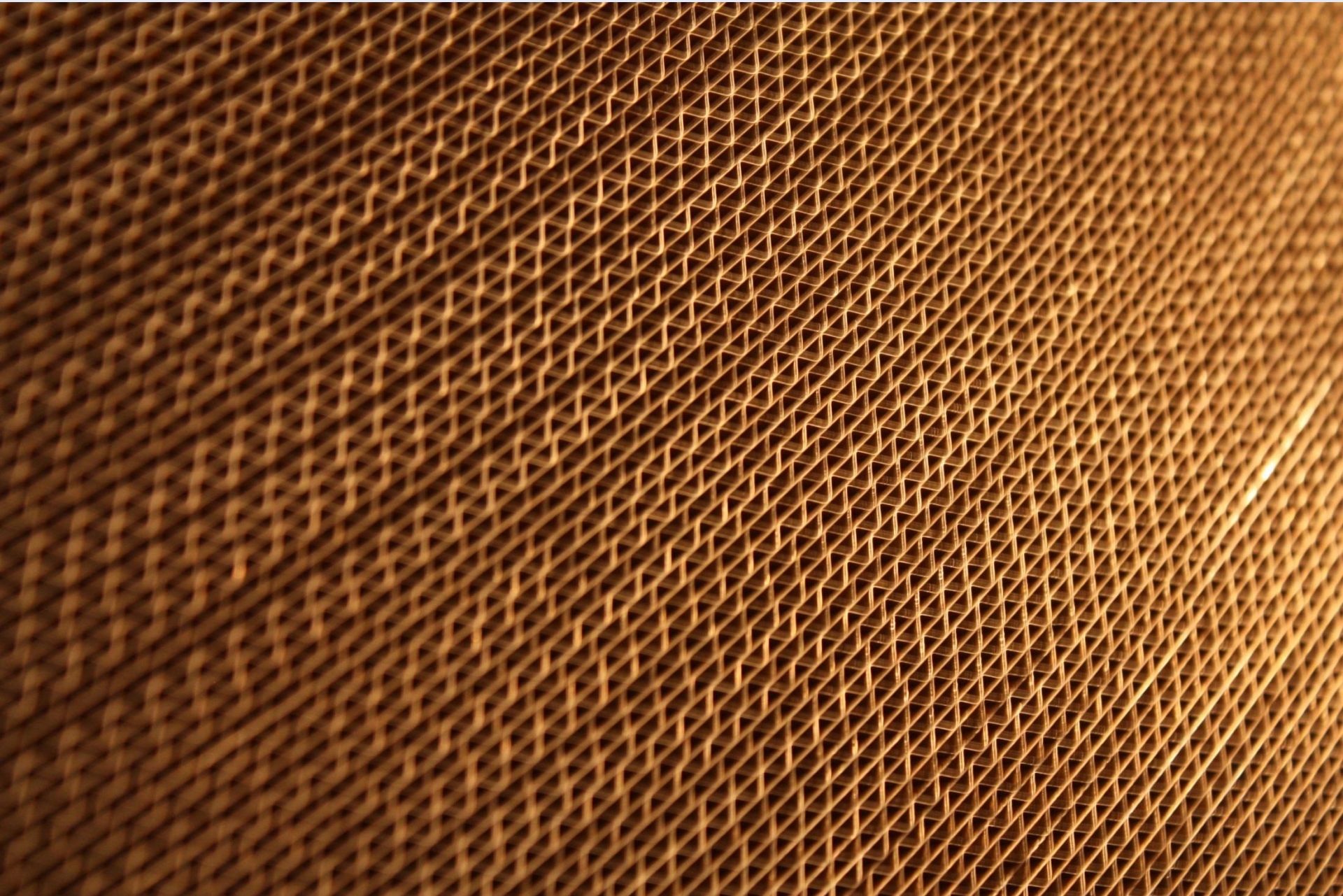
- Kyoto wheel cooling
- Isolated hot / cold air
- Electronically secured racks
- ISO-Base earthquake mitigation
- Personnel on-site 24 / 7 / 365
- Separation of power and network cabling
- Equipment must be front to rear cooling

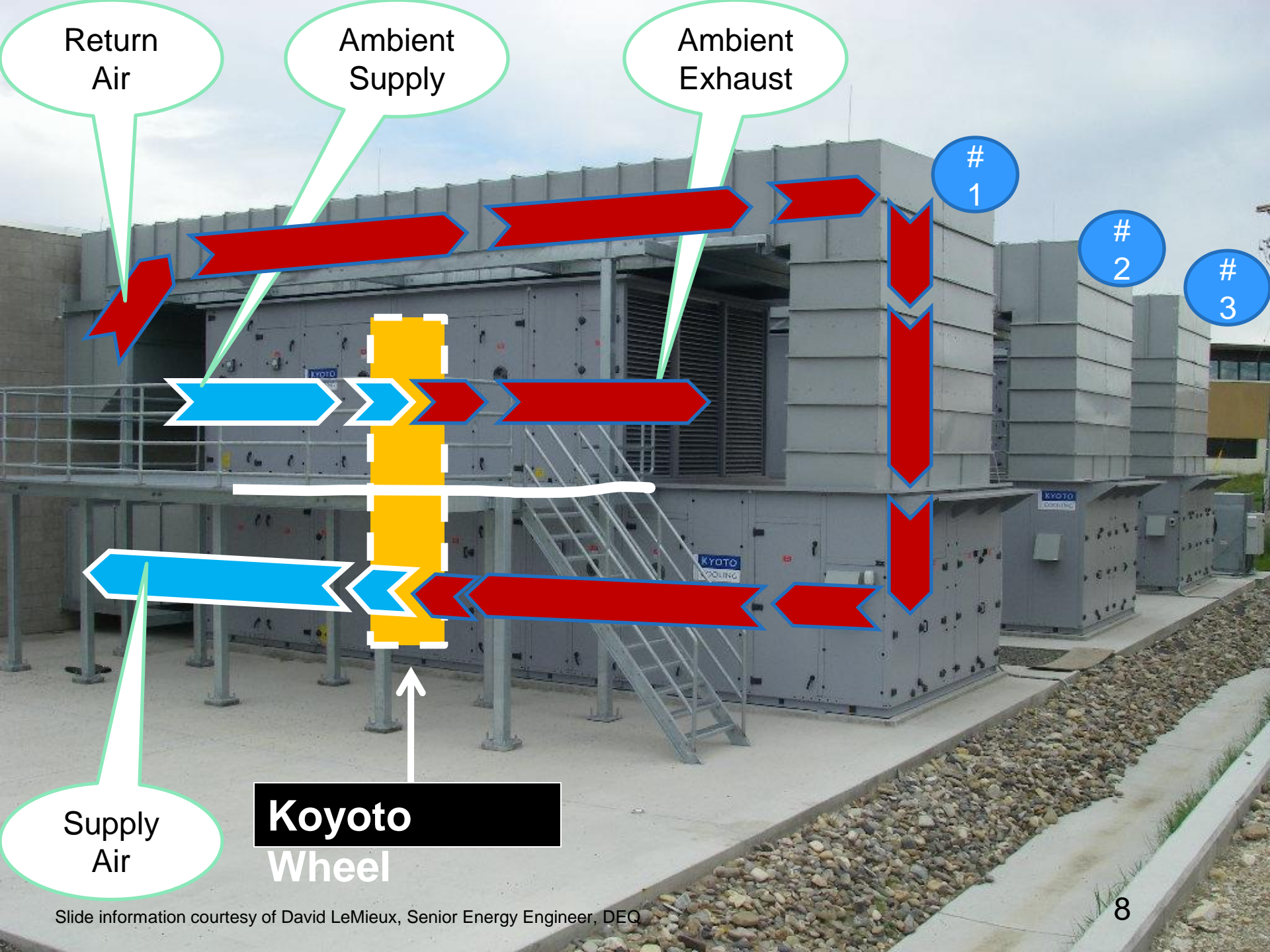


Unique Features - Kyoto Cooling

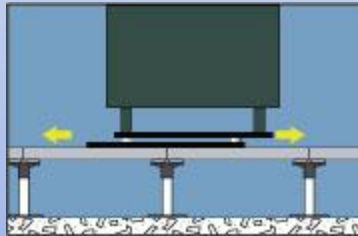
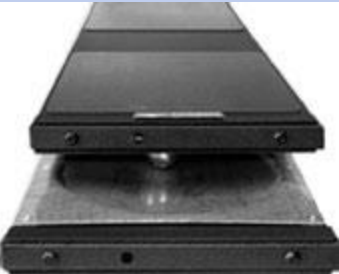
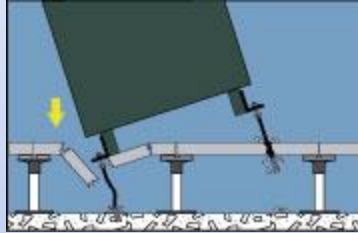
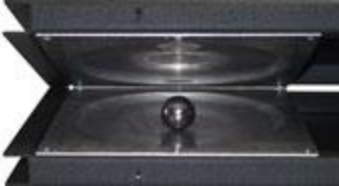


**>5 Acres
Aluminum fin**





Unique Features, ISO-Base



MCDC Miles City Rack Space includes

- SITSD provides rack
- Exclusive use of available rack space
- Video surveillance
- Electrical power
- Dual power (if your equipment supports)
- Uninterruptable power supply (UPS)
- Emergency generator power backup
- Fire detection and prevention
- Environmental monitoring



MCDC Miles City U Space includes

- All the same benefits as Rack Space but...
- Shared use of available rack space



MCDC Miles City Features

- Standard racks
- Conventional cooling
- Attended during normal business hours
- Separation of power and network cabling



Data Center Capacity

SMDC

- 190 maximum racks with current build capacity
- Currently leasing 96 racks, or 50.5% filled
- Total capacity if built out is 247 racks, or 38.9% filled

MCDC

- 96 maximum racks
- Currently leasing 44 racks, or 45.8% filled

Entities in the Data Centers

SMDC - Helena

- COR
- DEQ
- DLI
- DNR
- DOR
- FWP
- GOV
- HHS
- LEG
- MDT
- MSL
- OPI
- PSC
- SAO
- SOS
- STF
- DOA/MPERA
- DOA/SITSD
- DOA/TRS
- Montana Interactive
- State of Oregon

MCDC – Miles City

- DOR
- HHS
- MDT
- OPI
- PSC (soon, no date set)
- SOS
- STF (soon, no date set)
- DOA/SITSD
- Montana Interactive
- University of Montana

Benefits

- Physical Security
 - Intrusion Detection Fence, Anti-climbing Fence
 - Background Checks
 - Badge Access
 - Biometric Access
 - Rack Access
 - Security Cameras
- Security Monitoring
 - Firewall Activity
 - Intrusion Detection System
 - Virus/Malware Activity
 - Badge Access
 - Security Cameras

More Benefits

- Network

- Geographically Distributed
- Diverse Carriers
- Diverse Entrance Facilities
- Redundancy/Resiliency
- Continuity of Government
- Overlay Transport Virtualization (OTV)

- Data Center

- Redundant Systems for UPS and Cooling
- Backup Power
- Security Systems
- 24x7x365 Staffing
- Clean Room
- Energy Efficiency

Q & A

Data Centers at a Glance

	SMDC Helena	MCDC Miles City
Square Footage	5618 (247 racks)	2900 (96 racks)
Attended operation	Y	Y Business hrs
Electricity	Non Metered	Non Metered
Emergency Power Generators	2	1
Capacity	1250 KW	1250KW
Fuel supply	8700 Gal.	4350 Gal.
Maintenance cycle	weekly	weekly
UPS	2	2
Capacity	500KVA each	500 KVA
Span	9 Minutes	15 Minutes
Water detection	Y	Y
Fire prevention	FM 200 EPO	FM 200 EPO
Cooling	Kyoto 3 wheels	Conventional
Capacity	300KW / wheel	420 KW
Constraints	racks with chimneys	none
Isolation Bases	Y	N
Racks Provided	Y	Y
Video Surveillance	Y	Y
Environmental Monitoring	Y	Y
Support Dual Power	Y	Y
Secured Racks	Y	Y



